

# Subjective dimensions of poverty in Albania

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## Abstract

Subjective measurement is another important aspect of poverty and wellbeing measurement method. The estimation through self assessment is another non monetary poverty that takes into consideration the monetary and non monetary aspects. The self assessment is estimated taking into consideration qualitative and quantitative measure. In this paper there are estimated three dimensions of subjective poverty, qualitative one, estimated with minimum income needed and two others expressed with categories, happiness and assessment in scale. The research aim to study and to find the best methods of the subjective measurement, as an important dimension of non monetary poverty is to analyze trend and correlation with objective poverty and to define factors that influence in the probability of feeling poor. It is supposed that this assessment is influenced by different socio-economic indicators like household characteristics, income declared, education, employment, etc. The analyses is based on data from the Living standard Measurement Survey and there are presented methods how to calculate different dimensions of subjective assessment in order to update further on with other sources.

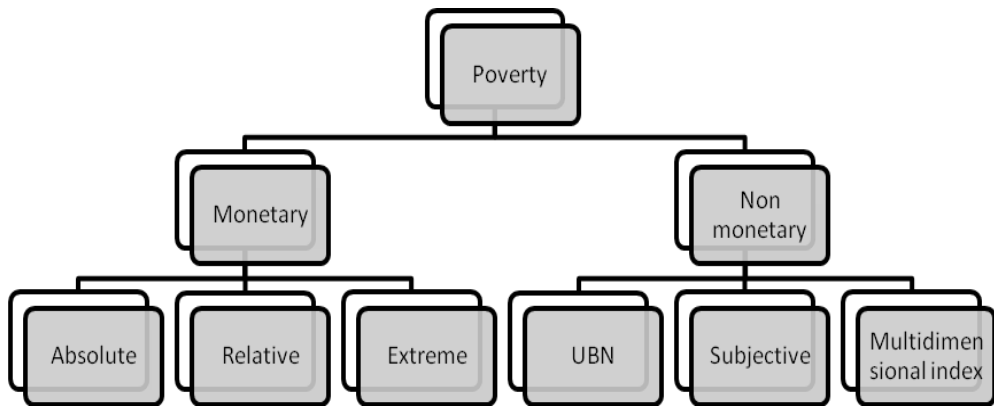
**Key words:** Subjective: poverty; perception; dimensions; welfare;

## 1. Introduction

The importance of the subjective poverty

There are different methods of measuring poverty. Up to 2012, in Albania the poverty is measured through consumption using LSMS data. Another dimension of poverty is through the subjective perception. Subjective perception is not only a measure of poverty but also a measure of non monetary welfare of households.

**Figure 1:** Poverty measures



There are theories that have a correlation between subjective and objective measures (Bici and Mañcellari, 2017). The subjective assessment takes into consideration monetary and non monetary deprivation. Let say that somebody has a job has a considerable amount of income or expenditures for every month but they live in a dwelling that is in a bad condition, or they pay a mortgage and the amount of considered income owned goes for dwelling. Also a person have a considered income level, not to be poor by monetary definition but have a sick person at home and this may influence to a not positive rank on subjective assesment. It could be also vice- versa, let say have a good home condition, but persons are unemployed and are monetary poor or they feel poor even for this reason. So sometimes the subjective welfare goes in the same direction and sometimes in the opposite direction, this is related with the most influenced factor in the moment of interview.

Non-monetary and specifically subjective poverty is more related to the long-term and the expectation about future situation. Laderchi et al. (2003)

analyzes the inconsistencies of the four different types of poverty measurement. Empirically, there is an overlapping of individuals falling into different kinds of poverty for example monetary poverty and poverty of deprivation.

Consider a very deprived, poor, overworked and sick person but who is very satisfied with social conditions (through, say, religion, political involvements, or cultural situation). Can we have the opportunity to believe that he is good only because he is happy and satisfied? Can we say that a person's standard of living is high if the life he or she lives is in complete deprivation? The standard of life cannot be separated from the nature of person (Sen, 1991).

Satisfaction should be taken into consideration more widely from the researchers and policymakers as an indicator of well-being and important for a variety of indicators.

## **2. Dimensions of subjective poverty**

There are proposed different methods to define poverty and welfare through self assessment instruments. A deep analysis on subjective poverty in Albania is done by Bici 2017<sup>1</sup>. An early proposal was from Cantril (1965), concept of "ladder" where the individual are ask to self define their level of happiness, satisfaction with life or economic level. This concept was modified by leading individuals to determine the level of poverty. Subjective questions cover different dimensions like finance, amount of income, food consumption, SPL size and satisfaction with life, connections and relationships, selective dimensions. In the subjective definition we will considered from the list of the subjective assessment and different methods to measure, three main dimensions, SPL, HA and MIQ. These express the current situation, the past and the feeling for the future, express positive and negative trends, quantitative and qualitative. At the base of these group of questions are evaluated the subjective dimensions that are used in analytical analysis. The answer will range from one family to another and from the size of the family or other characteristics that influence the economic situation or conditions of the family's life which cannot be obtained from objective measurement (Ravallion, 2012). Another form of

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<sup>1</sup> <http://doktoratura.unitir.edu.al>

measurement is generating a multidimensional indicator which includes some of the indicators presented above.

In the aggregate dimension created for the analysis of the welfare state and the level of the living of individuals, a combination of the above questions in a descriptive form is obtained. In an empirical form it is a combination of the following questions in an aggregated form created for the analysis of the welfare and the level of the living of the individuals. We will not treat broadly all subjective questions. We have taken into consideration three different forms of questions, with categories, quantitative and in levels form and all analyzed by the determinants. There are three basic subjective dimensions SPL, MIQ and HA.

**Table 1:** Subjective poverty dimensions

Subjective factors	Example of the question
<b>SPL Dimensions</b>	Imagine a 10 scale level. In the lowest stay the poorest and in the highest, to the 10 <sup>th</sup> stay the richest, In which level you are?
<b>Income dimensions (MIQ)</b>	Which is the minimum monthly income that you consider as absolutely necessary to your household to make ends meet?
	Which is the current monthly income for your household?
	During next 12 months, the highest amount of money of your households comes from....
<b>Happiness with life</b>	Are you currently happy with your current life?
	Do you think that your life during this last three years is:...
	Do you think that your life during next month your life generally could....

Other dimensions:

- Financial dimensions;
- Selective aspects;
- Connections;
- Consumption dimension.

## 2.1. SPL Assessment

In different literature, there are various estimations and methods for measuring the economic and financial situation. The most usable and most relevant assessment of subjective poverty measurement is through SPL assessment as explained above. The same assessment is used by World Bank. Some ask for a 10-level assessment and in some places it appears on the Likert scale. Cantril is the leader in self-assessment of the individual's situation through 10 degrees from 1 to 10. *"Imagine a level of 10-degree. In the lowest level, so in the first one, are the poorest, while at the highest level, the 10th, stand to the rich. What scale do you stay?"*<sup>2</sup>

Helliwell et al. (2010) used the same model for Cantril leader and satisfaction for life and found identical coefficients and consistent. Indicator calculated by CL (Cantril leader) or subjective line (SPL) considered as poor individuals in the first two levels of self-evaluation is considered poor and all the others no. In different works there is thought using subjective poverty and self-assessment of poverty in developing countries. Pradhan and Ravallion (2000) use surveys that measure objective poverty with the consumption side and compare it with subjective poverty. Subjective poverty has a wider spread than the objective one by area. The assessment of individuals and the determination of their subjective poverty level is influenced by their relative condition with others (Runciman, 1966; Easterlin, 1995; and Oswald, 1997). Ravallion and Lokshin (2001, 2002) use in their analysis the self-assessment of their situation at nine levels. Classification is based on subjective poverty, welfare and income. But significant difference is noted in the classification that individuals do by their self considered as subjective poverty and objective poverty. This is because the subjective rankings include other indicators such as education, employment, status health and sustainable income. However, the differences in rank appear in the variations in utility (Ravallion and Lokshin, 2001), and rank is not necessarily an indicator of subjective happiness or well-being.

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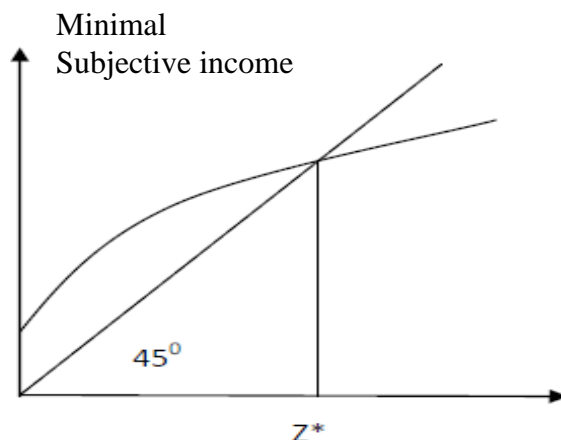
<sup>2</sup> [www.instat.gov.al](http://www.instat.gov.al) (LSMS questionnaire)

## 2.2. MIQ assessment

Initially this method was introduced by Van Praag (1968) the question of income level (IEQ). The questions ask individuals what level of income they consider very good or very bad (the variable was expressed by categories). Van Praag (1968) uses the question of equivalent income that is categorical from 1 to 5, respectively 'very bad' to 'very good'. A similar approach (Kapteyn, 1994 and Kapteyn et al., 1988) asks the individual how much income he / she would consider necessary to meet the minimum basic needs (MIQ). This method is also used in addressing this topic in a sub-item. Subjective poverty based on the question of minimum income (MIQ) (Kapteyn et al., 1988) is measured according to the question 'What is the level of your minimum income you consider absolutely necessary to fulfill the basic needs'. We will focus in this method in our calculations.

Pradhan and Ravallion (2000) experimented Kapteyn's approach to developing countries by asking about the level of food or total expenditure level. The line of subjective poverty based on the minimum income question (MIQ) is defined through comparison with the current income declared by households. An individual qualifies as poor if his current income is below the level they have determined as necessary to afford basic needs. However, this assessment form is problematic in cases where different individuals declare the same income and are treated differently. Also there are other factors that may influence their answer at the moment of interview. There may also be individuals with the same standard of living that may have provided different levels of MIQ responses and can be considered poor to the rule of definition of the poor. Various empirical studies have seen that the data given by MIQ with current incomes tend to be increased with the increase of current incomes.

A combination of MIQ with current incomes gives us the poverty line. On the other hand, only at this level where current incomes are equal to the minimum income ( $z^*$ ) also gives a level real income on the part of the respondents. The more income needed than have families are likely to overestimate their minimum level and those with less income needed are likely to underestimate it. In this way the point  $z^*$  is potentially a poverty line. Income earners have the tendency to respond to their income being sufficient, while those under  $z^*$  tend to respond negatively (Figure 4). The answer of the MIQ depends not only on the income but also on the characteristics.

**Figure 2:** Subjective income and actual income

Families with different characteristics need different income to meet their needs. As it is also shown by Goedhart et al. (1977), the subjective poverty line was measured by comparing actual incomes with minimal subjective incomes. With the functional form, the above line would appear

$$\text{Log}(Y_{\min}) = a_0 + a_1 \log(Y) \quad [1]$$

We classify as poor families, those reporting having income below the level reported in MIQ and this for each family composition. A regressive log-log function is also possible as in Van den Bosch et al. (1993). MIQ has been implemented in a number of OECD countries and has had some efforts to apply it in developing countries. There are a numbers of possible limitations as 'Income' is not a well-defined and well-developed concept in most developing countries, especially (but not limited to) rural areas. This situation is difficult in households involved in agriculture or in informal economy that in our case is more complex to be measured. In our case, we will analyze the income based on the question of their adequacy to meet the basic needs. The basic assumption on which this indicator is evaluated is that each respondent has understood in the same way the question. Individuals do not have the same perception on poverty but it depends from income. It is supposed that the estimated minimum level increases with the increase of personal income.

### 2.3. Happiness approach

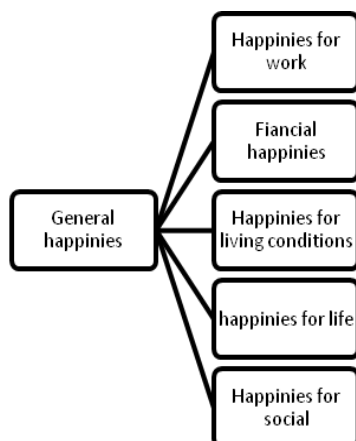
Another method of building SWL is satisfaction for life (HA) 'Are you generally happy with your life? "Happiness Approach" (HA) is used to model wellbeing and quality of life. In addition to the above form of measurement of HA, there is another construction method of SWL (or HA) considering some questions of satisfaction as a aggregated factor considering a set of questions related to current satisfaction, happiness, and future satisfaction. Some authors argue that the assessment of what is seen in actual life depends on what aspect of life from the past comes to mind during the reporting. Subjective estimation about the satisfaction of life has relative dimensions, since satisfaction is most likely to be judged by expectations. For this aggregated factor was taken in the consideration four basic questions related with the time being:

- Are you satisfied with current life?
- Do you think that your life in last three years is improved?
- Do you think that your life in next 12 months generally will...?
- Happiness' level (actual assessment).

These are categorical variables and noticing that Cronbach  $\alpha$  for SWL is 0.875 meaning the classification is reliable and acceptable for the variables of considered variables.

Except with the comparability in time, it exist another form of aggregated factors, taking into consideration different indicators in the actual situation. Figure 2 gives the dimensions of satisfaction, a part of which contributes to the creation of happiness dimension. Happiness with the work and satisfaction for the social environment is not possible to be measured, so our analysis will not be taken into consideration. However recent studies poor individuals give a poor overall assessment of satisfaction to life but still report a positive assessment level at particular levels and in aspects of social relations. Also various studies indicate that quantitative assessments should be complemented by a multi-dimensional poverty assessment that is that of qualitative assessment and includes subjective assessment of poorer individuals (Hulme et al., 2001). Satisfaction is estimated by evaluating different fields and different concepts (Figure 2).



**Figure 3:** Happiness' dimensions

Satisfaction variables will generally be used categorical. Only in special cases will be analyzed as the aggregate of the group of a set of variables. A very important point that measures subjective poverty is the assessment of happiness with life (Camfield, 2003), which is a multi-dimensional concept. This multidimensional concept expresses not only the deprivation of material but also other aspects of life such as health, love, employment, family, etc. This assessment is based on the self-declaration of the person who answers and measures the quality of life of the person responded. Different from monetary poverty and possibilities not being deprived, individuals through this subjective assessment also determine their level of well-being (Ferrer-I-Carbonell, 2002). Part of the research included the assessment of the happinies functions, in which happiness (subjectively assessed at ordinal level) is the dependent variables and the different socioeconomic characteristics of the individual, family, or community are used as explanatory variables.

The assessment of this indicator requires a set of assumptions:

- 1) Individuals to be able to respond subjectively assessing their situation;
- 2) The responses between individuals should be comparable.

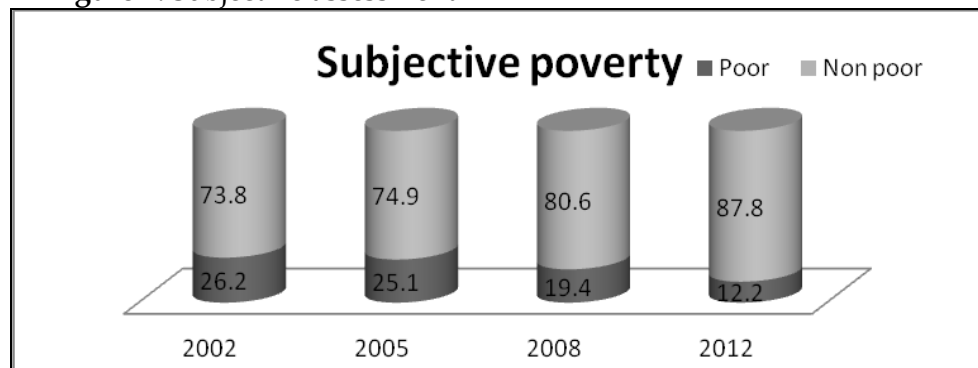
Veenhoven (2000) takes into account the position of individuals who are able to respond to their situation. He also underlines that their responses have the opinion how they felt in the past. Other critiques feel that these answers cannot be compared as individuals have different levels of mind

or different factors influencing their level. Someone who answers that is 'very happy' may possibly be as happy as someone who says that is 'happy' that, according to economists, is referred to as the 'incompatible utility' theorem of the Veenhoven (Veenhoven, 2004). Further Veenhoven (1991) argues that satisfaction for life is not relative. Sen (1992, 1999) concludes that subjective measurement of the welfare is doubtful because poor individuals can evaluate to be satisfied with the level of living, because they are used to. Another opinion is that rich individuals suffer from inadequacy, or other aspects that give you pleasure.

However, we will focus on the level of total satisfaction with life, assuming that it also sums up some of the other estimates. Individuals can ease assess their life's trend by determining the current assessment as an indicator of general well-being. It can be said that the weather also could be influence to the assessment of the individual. Schwarz, Clore (1983) suggest that the interview recorded the happiness level when are collected to the sunny days more than in rain. Pleasure is useful for measuring well-being but should be accompanied by other objective factors. So satisfaction for life is a subjective assessment which is not directly measured as income.

### **3. Analyzing subjective trends and influencing factors**

Three dimensions appear different with other subjective variables and other non subjective variables. The same as objective poverty (INSTAT, 2013) even the subjective trend is decreased by years (Figure 3). The subjective assessment (SPL) measured as poor the individuals that are in the first two levels. The trend of subjective poverty is almost comparable with objective figures presented in Instate website.

**Figure 4:** Subjective assessment**Table 2:** Subjective assessment by financial factors

Financial subjective assessment	SPL		MIQ		Happiness	
	Non poor	Poor	Non poor	Poor	Satisfied	Not satisfied
<b>Satisfied with current financial situation</b>	2.81	3.68	2.88	3.11	1.85	3.39
<b>Financial situation in last three years</b>	3.06	4.05	3.14	3.37	2.27	3.51
<b>Feeling for next 12 months</b>	3.29	4.26	3.38	3.59	2.61	3.70

The difference in the financial assessment between the poor and the non-poor is visible. Given the rankings of variables in the scale of 1 to 5 there is noticeably a significant difference between the poor and non poor. Taking to the consideration the levels where the 1 are fully satisfied and 4 are not satisfied and 5 are unresponsive, it is seen that the three-dimensional poor are relatively more dissatisfied compared to the non-poor. The respondents are dissatisfied with the financial situation, feel bad about their financial situation and have an unsatisfactory feeling about the situation in the next 12 months. So an estimated effect now but also has a long-term effect and influence the expectation. This is the difference compared with objective measurement and the strong point out that can give by subjective assessment. The table above gives in some way a comparison in three different moments of time and the effect it has on

different economic groups of individuals. Also, the level of current poverty is an inherited phenomenon. The subjective dimensions for economically different individuals indicate that the level of average income varies (Table 3). Verme, (2011) have studied the relationship of life satisfaction with income.

**Table 3:** Subjective assessment by income measured

Income	SPL		MIQ		Happinies	
	Non poor	Poor	Non poor	Poor	Satisfied	Not satisfied
<b>Minimal per capita income needed</b>	12,829	11,151	16,287	11,887	14,303	11,885
<b>Actual income per capita</b>	10,676	5,444	10,237	9,046	15,406	7,714
<b>During next 12 months the highest share of your household income will come from:</b>	Public Sector	Social benefit from state	His business	Social benefit from state	Public Sector	Social benefit from state

For each of the dimensions, there is a significant difference in declared income, current per capita income, and minimum per capita income. The gap between the poor and the non-poor is higher for current incomes, which indicates that their needs are nearly the same, but the opportunities they face are considerable different. What is problematic for this group of individuals considered as poor, most are kept with social assistance. Over the next 12 months, the source of income for the poor are expected to come from the social assistance from the state. During the next 12 months, the highest share of non poor household income will come from: Public Sector Employment, or the profit taken from his/her business.

**Table 4:** Subjective assessment of food effort expenditures

	SPL		MIQ		Happiness	
	Non poor	Poor	Non poor	Poor	Satisfied	Not satisfied
<b>Actual consumption level</b>	2.27	2.80	2.31	2.43	1.92	2.49
<b>Expenditures for food and other basic necessities</b>	2.32	2.82	2.36	2.47	1.96	2.54
<b>Worry if could ensure for himself and his family basic food and non food products for next 12 months</b>	41.2%	84.6%	45.1%	54.4%	17.9%	60.1%

A poor society, what have in their budget spend on food? In our country this is characterized by a large share of total food expenditure (INSTAT, 2013). According to the Household Budget Survey (ABF) (INSTAT, 2015), about 49% of household spending goes for food. The rating for the current level of consumption passes from "1 - very acceptable" to "3-not at all acceptable". This rating is higher for poorer individuals and those who are not satisfied. Subjective assessment shows us three things, the actual assessment, the comparison with the past, and expectations for the future. Table 5 gives us an individual assessment for 2012 and 2008 by making a comparison of the same individuals over the years. Categories range from 1 (the poorest) to 10 (the richest) by Cantril levels.

**Table 5:** Subjective assessment by subjective rank

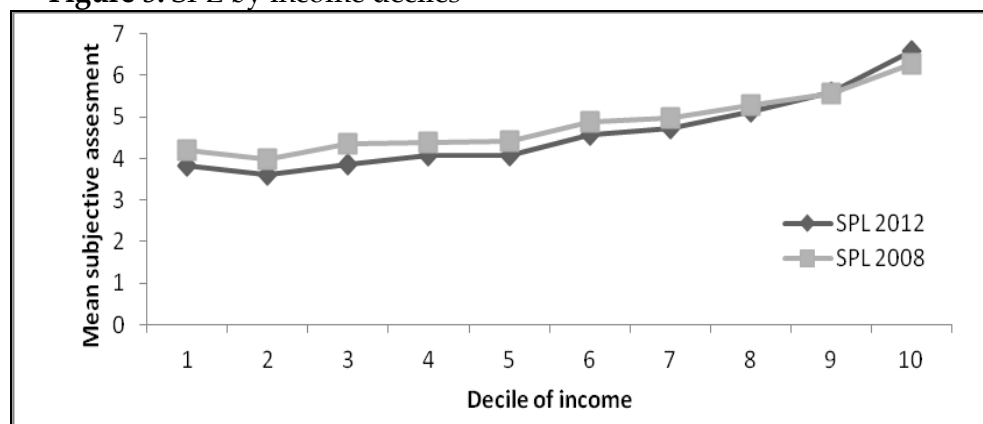
	SPL		MIQ		Happiness	
	Non poor	Poor	Non poor	Poor	Satisfied	Not satisfied
<b>Level from 1-10 that you are today</b>	4.98	1.67	4.65	4.26	6.02	3.94
<b>Level from 1-10 in 2008</b>	5.12	2.51	4.84	4.62	5.78	4.37

Actual rating in some sense is a measure of SPL but we nevertheless took an average rating for both groups of individuals (poor and not poor). SPL and HA have a significant difference in assessment. MIQ for the poor is lower but not at the same margin. The assessment made compared to the previous level, which was in 2008 (which also corresponds with the previous survey) shows that poverty is an inherited factor since this level has been and then is present to the same individuals. Insecurity is a problematic phenomenon. Income insurance remains problematic for the poor. According to each dimension, earning money is one of the most worrying aspects for the poor. While for the non-poor mainly disturbing is safety and health (Table 6). The poor do not only have less income, they value themselves at the lowest SPL levels, but are also worried as they will earn income in the future.

**Table 6:** Subjective assessment by selective deprived aspect

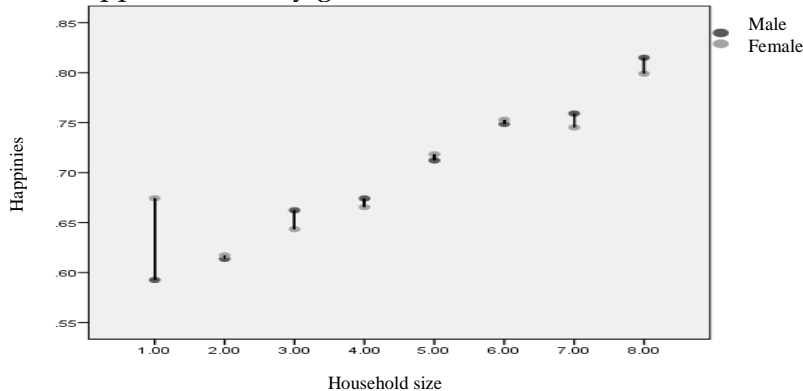
	SPL		MIQ		Happiness	
	Non poor	Poor	Non poor	Non poor	Satisfied	Not satisfied
<b>Aspect that you are most worry of</b>	Security	Money	Security	Money	Health	Money

The SPL estimate the percentage of spending that reflects the same trend (Figure 4). There are more individuals who value themselves positively (7+) for the highest levels of consumption. The focus of the individuals is almost in the diagonal, which shows the positive relationship between the two measurements.

**Figure 5:** SPL by income deciles

Some authors have studies of other non-monetary income such as family status (Waite, 1995), migration (Abdallah and Shah, 2012), employment (Johnson et al., 2008) or education (Cárdenas and Mejía, 2008) that may influence to the subjective assessment. Coefficients and statistical significance for the three dimensions and variables related to family characteristics are given in Annex. The variables involved are related to the characteristics of the head of the household (education, employment, gender), family members characteristics (number of unemployed, at least one employee, maternity education, social benefits, health) as well as characteristics related to family structure and composition (number of children under 5, number of children 5-10 years old, number of elderly people).

The number of children is used as a quantitative variable and is taken into the consideration having or not a child at home. Having more children means fewer chances that individuals feel themselves poor; in general, households with fewer children have less chance of considering themselves as poor. The number of children according to many different studies has a negative impact on life satisfaction (Frey and Stutzer, 1999; Van Praag et al., 2000). Single female is happier compared to a single male (Figure 5). With the increase of the household size, the happiness is increased and the gender difference is almost the same. To the bigger households (size three or four) the happiness for the gender specific is the opposite, the males are happier than females but the difference is lower.

**Figure 6: Happiness level by gender and household size**

Difficult is with the amount of income needed in order not to be poor. These families are happy not only with the current situation by placing themselves at the highest levels, but they feel more confident about their future situation and the lives of their children. Another important impact has the source of income, employment or the risk of not having necessary income (unemployment). Number of employed persons at home increase chances not to be poor (1.450=SPL, 1.802=fully happy, 1.255=happy and 1.372=MIQ non poor). Also the poverty in a way is an inheritance phenomenon. So the households that have head unemployed (headunemp=1) have more chances to be poor or to feel poor. The head employed (headunemp=0) means more security, more happy and less chances to be considered poor. This is shown by higher odd ratio coefficients (Annex).

Education influence directly and indirectly. As non monetary factors, higher education means higher chances to have a well paid job, higher households income, less poor and more assets at home (Bici, 2015). Also being in a household with parent well educated, especially mother have higher education level (Ed Mother =3.00, secondary or university used as a reference category). The health also plays an important role to the poverty. Having a good health means more happiness, ability to work, ability to earn income and not to spend. Being part of the Social benefit scheme means for SPL calculation is a burden, or at least is a poor person. In the opposite way is for HA and MIQ where the social benefit is considered as a way to move out of poverty. Some non monetary important factors are related with social participation.



Being part of different organization and participate in the political, professional and religion organizations have less chances to be SPL poor. The same is for MIQ and more or less for HA. The same impact has the number of friends and contacting them. Individuals that do not contact friends also do not need more money according to MIQ. So the influence of different factors is different to each dimension and is not related only with monetary aspects.

#### **4. Conclusion**

An important measure of poverty and wellbeing is the subjective measurement that takes into the consideration the monetary and non monetary aspects. To the subjective measure influencing different factors are related with household characteristics, employment, household composition and other non monetary aspects. The subjective poverty correlates with the monetary poverty and have the same trend by years. Each dimension of the subjective measure is influenced by income or consumption. Also are other factors that influence subjective level like being employed, having a possibility to take a salary, gender, number of children, elderly people at home, etc. The subjective poverty is important for defining deprived individual and risk factor that influence in being subjective poor. It may be objectively non poor as may have a salary, but could have higher expenditures for mortgage, or for a sick person at home so it feels poor compared with other households in the community or compared with himself some times (year, months) ago. So importance of subjective measure is that gives comparisons in time and with others in society.

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